

Software development models

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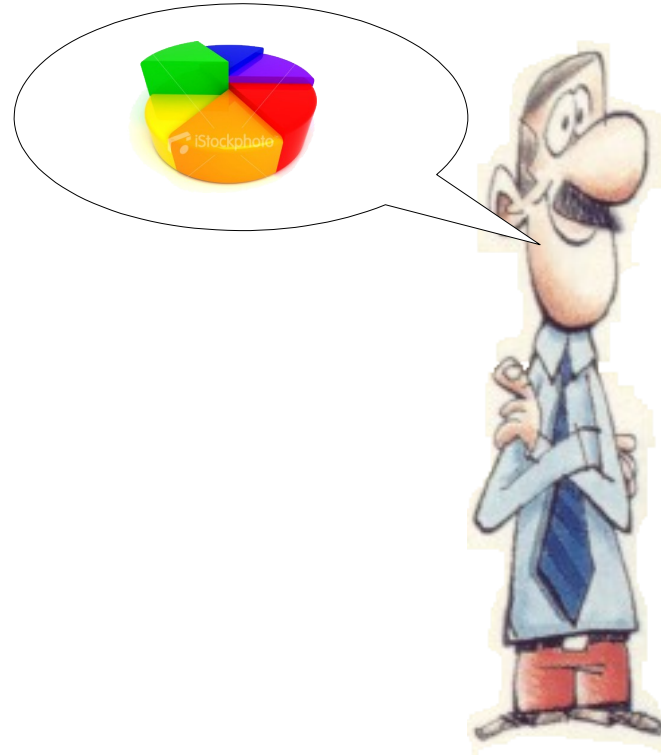
Summary

- Software development process
- Software development activities
- Waterfall development process
- Alternative development processes

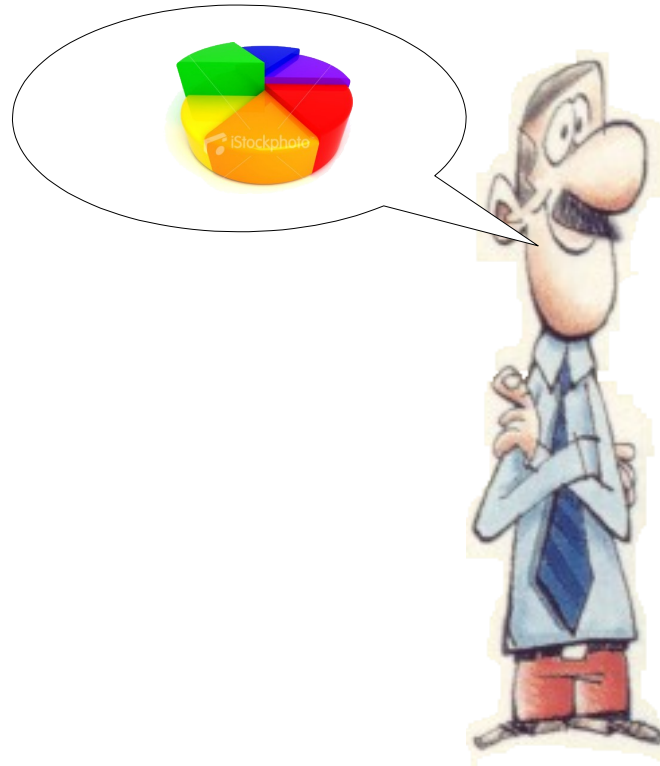
Software development process



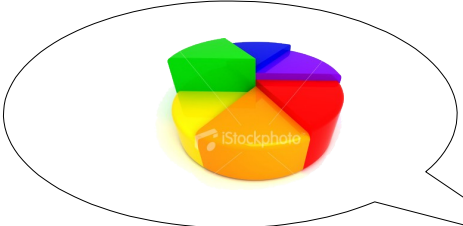
Software development process



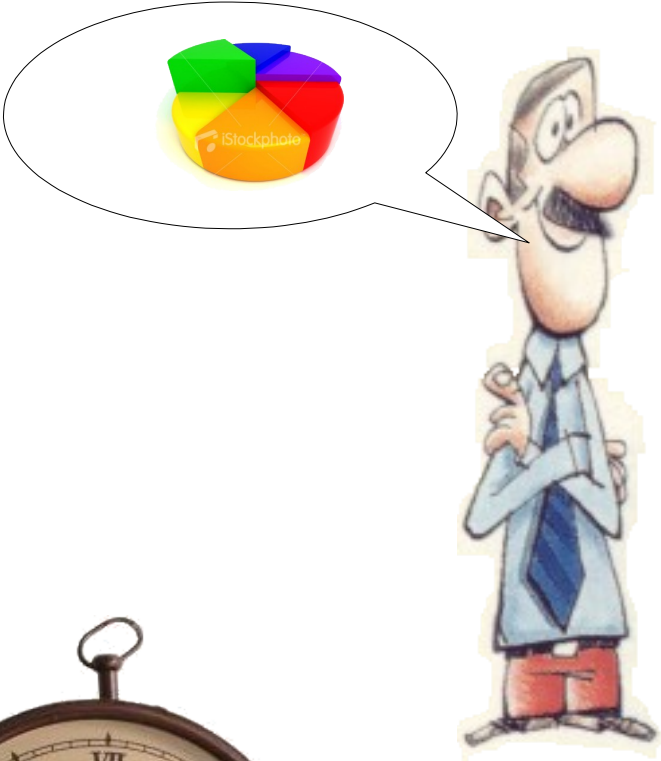
Software development process



Software development process



Software development process



Software attributes

- correctness, reliability, robustness
- performance
- usability
- testability
- maintainability
- resusability
- portability
- comprehensibility
- interoperability

Software development process

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Some try to systematize or formalize the seemingly unruly task of writing software. Others apply project management techniques to writing software.

The problem

Software projects can easily be delivered late or over budget.

Software development activities

feasibility analysis

Software development activities

feasibility analysis

requirements gathering
and analysis

Software development activities

feasibility analysis

requirements gathering
and analysis

design

Software development activities

feasibility analysis

requirements gathering
and analysis

design

development and
unit testing

Software development activities

feasibility analysis

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design

development and
unit testing

integration testing

Software development activities

feasibility analysis

requirements gathering
and analysis

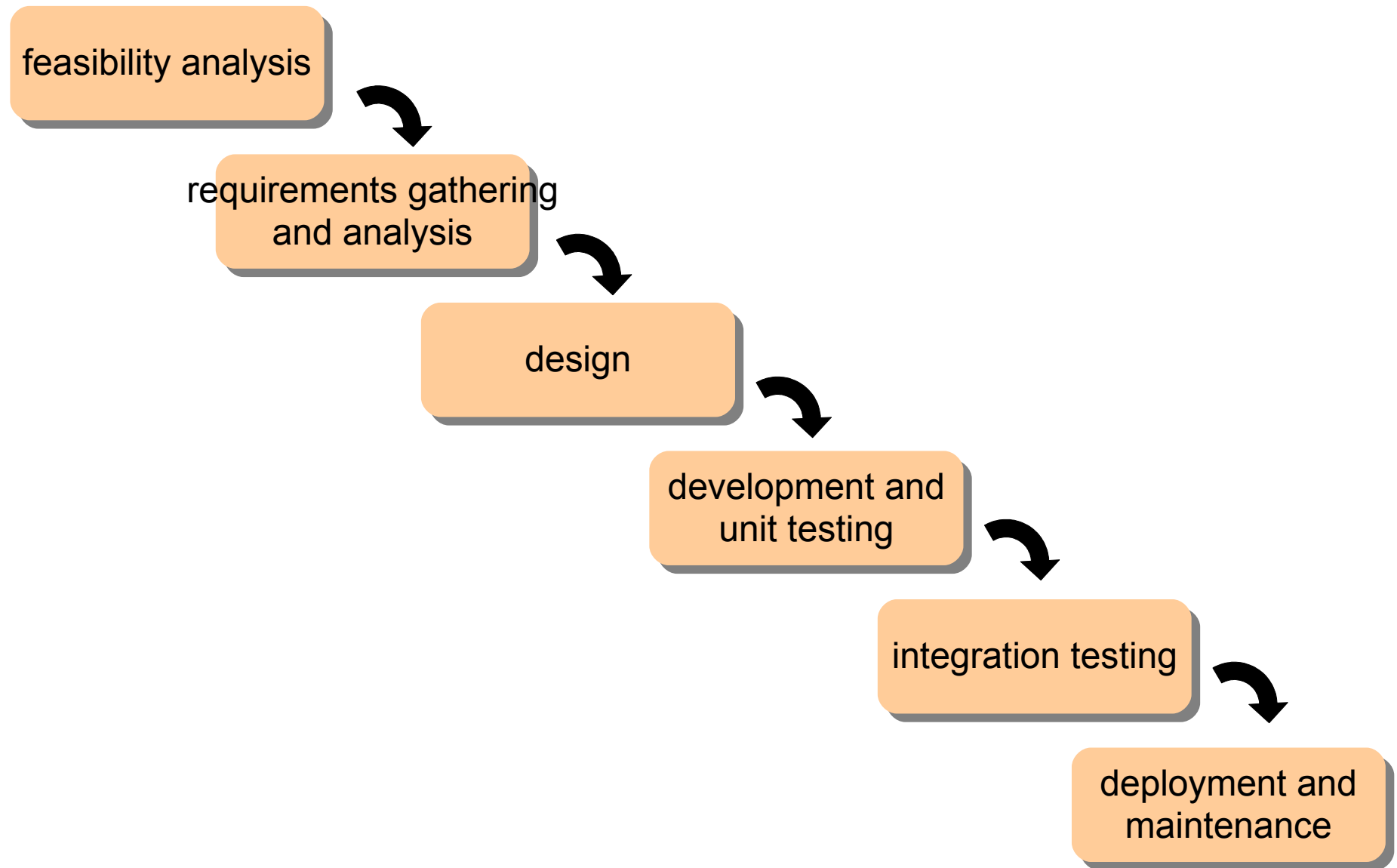
design

development and
unit testing

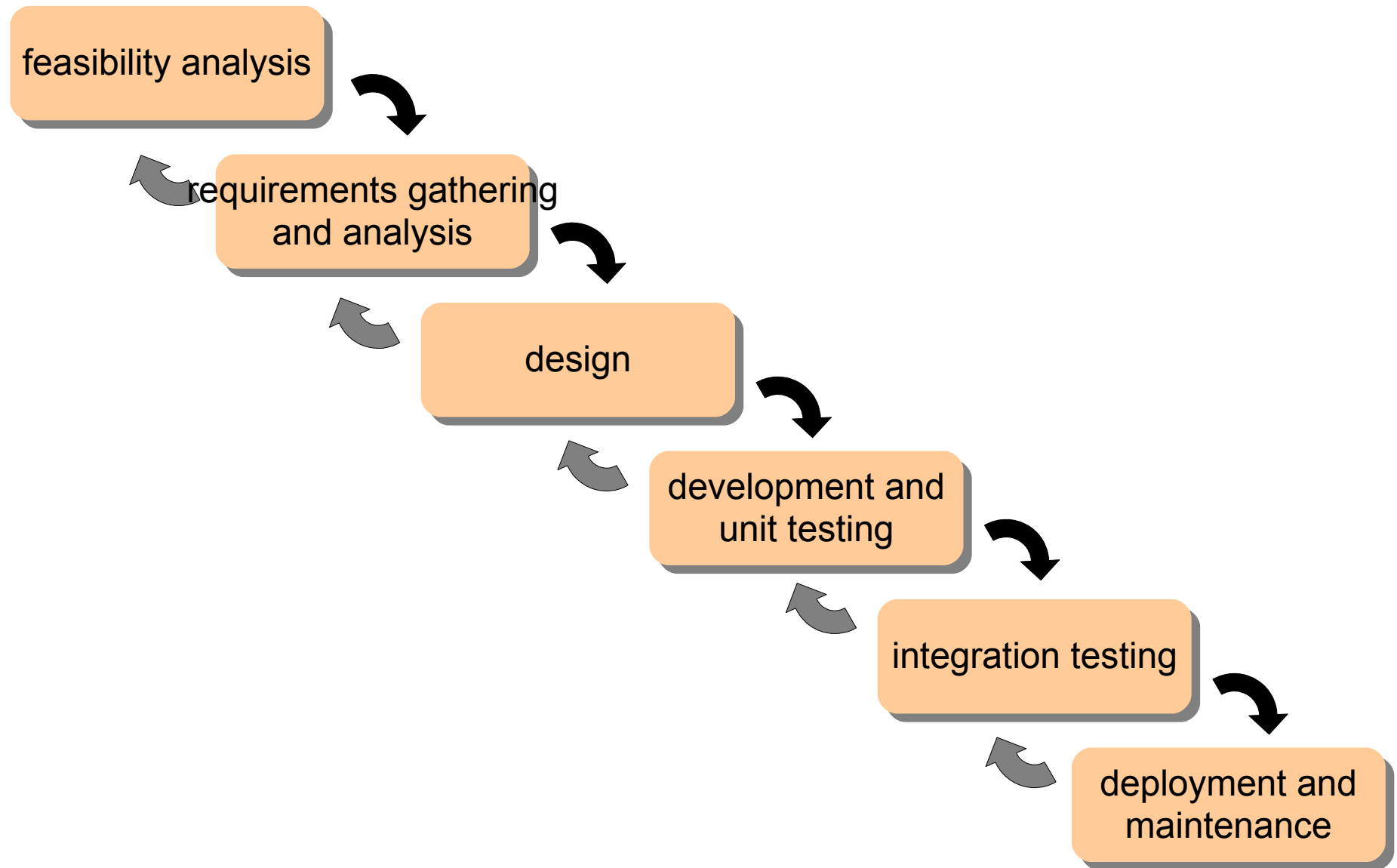
integration testing

deployment and
maintenance

Waterfall



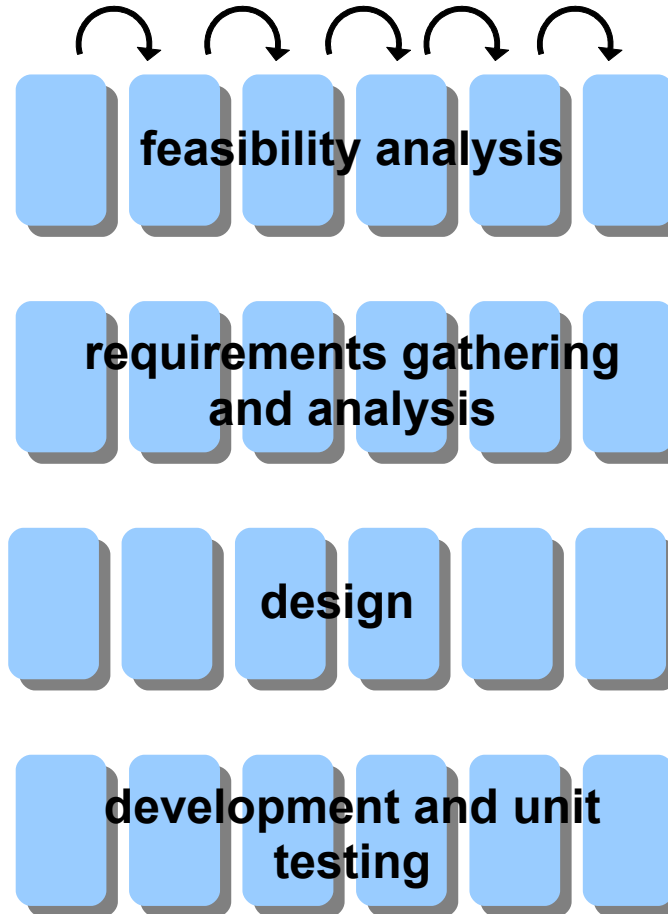
Waterfall with feedback



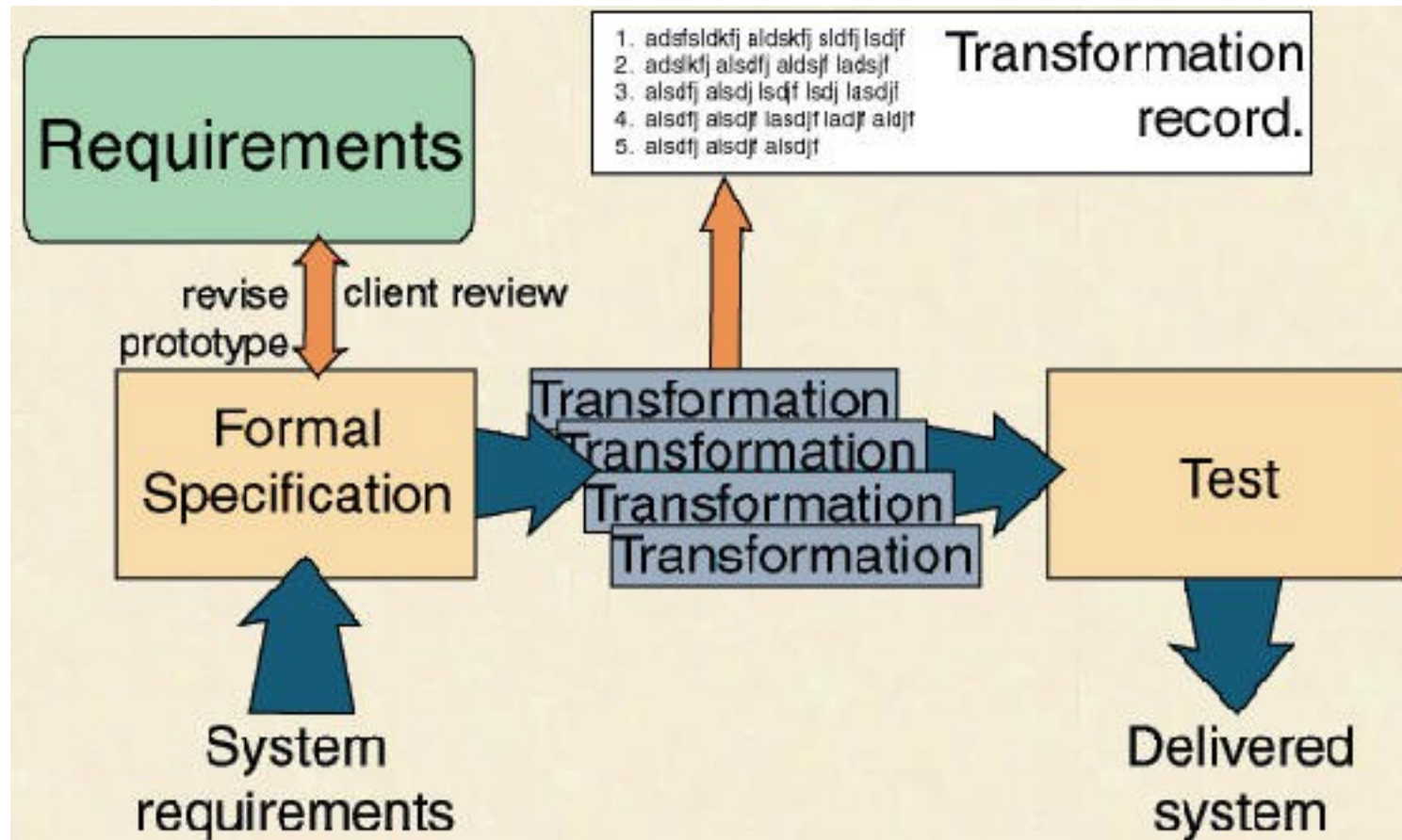
Alternative models

- Evolutionary
- Transformational
- Spiral

Evolutionary



– Transformational



Spiral

